AMENDMENTS TO THE CLAIMS

1.   (Currently amended)   An optical device comprising:

a target to be illuminated with rays of electromagnetic radiation;

a first reflector having first optical axis and a first and a second focal points on said first optical axis, said rays of electromagnetic radiation being directed substantially proximate to a first focal point of said first reflector to reflect from said first reflector and substantially converge at said second focal point; and

a second reflector having a second optical axis and a first and a second focal points on said second optical axis, said target being located substantially proximate to said first focal point of said second reflector to receive at least a portion of the rays of radiation that pass through said second focal point ~~focus~~ of said second reflector and are reflected by said second reflector to substantially converge at said first focal point of said second reflector, said second reflector being positioned and oriented with respect to said first reflector such that said second focal point of said first reflector and said second focal point of said second reflector are positioned substantially proximate and said first optical axis and said second optical axis are substantially collinear.

2.   (Previously presented)   The collecting and condensing system of claim 1, wherein the first reflector and the second reflector are about the same size and shape and have a corresponding size and optical orientation with respect to each other so that substantially each ray of radiation reflected by a surface portion of said first reflector is reflected by a corresponding surface portion of said second reflector toward said target so as to achieve substantially unit magnification between the rays of electromagnetic radiation being directed substantially proximate to said first focal point of said first reflector and the target.

3.   (Original)   The optical device of claim 1, wherein each of said first and said second reflectors comprises at least a portion of a substantial ellipsoid of revolution.

4.   (Original)   The optical device of claim 3, wherein each of said first and said second reflectors further comprises a non-ellipsoidal section.

5.   (Original)   The optical device of claim 1, wherein each of said first and said second reflectors comprises at least a portion of a substantial toroid of revolution.

6.   (Original)   The optical device of claim 1, wherein each of said first and said second reflectors comprises at least a portion of a substantial sphere of revolution.

7.   (Previously presented)   The optical device of claim 1, wherein a portion of the rays of electromagnetic radiation impinges directly on said first reflector and a portion of the electromagnetic radiation does not impinge directly on said first reflector and wherein said device further comprise an additional reflector constructed and arranged to reflect at least part of the portion of the electromagnetic radiation that does not impinge directly on said first reflector toward said first reflector through the first focal point of said first reflector to increase the flux intensity of the converging rays.

8.   (Previously presented)   The optical device of claim 7, wherein said additional reflector comprises a spherical retro-reflector disposed on a side of said first focal point of said first reflector opposite said first reflector to reflect electromagnetic radiation emitted away from said first reflector toward said first reflector through the first focal point of said first reflector.

9.   (Previously presented)   The optical device of claim 1, wherein said first and second optical axes substantially coincide with one another and wherein said first and second reflectors are arranged in an opposed, facing relation with respect to each other.

10.   (Original)   The optical device of claim 1 further comprising an image source illuminated by the radiation collected and condensed at said target, wherein said image source contains a stored image and said stored image is projected by the radiation.

11.   (Previously presented)   The optical device of claim 1 wherein the first and the second reflectors each have diameter that is substantially greater than a distance between the first focal point of said first reflector and the target.

12.   (Previously presented)   An optical device for collecting electromagnetic radiation and substantially focusing the collected radiation onto a target, said device comprising:

a first reflector comprising at least a portion of a revolution of a concave curve, said first reflector having a first optical axis and at least two focal points on said first optical axis, said first reflector substantially converging rays of radiation reflected from said first reflector at a second focal point of said first reflector when said rays of radiation are directed substantially proximate to a first focal point of said first reflector; and

a second reflector comprising at least a portion of a revolution of a concave curve, said second reflector having a second optical axis and at least two focal points on said second optical axis, said second reflector being positioned and oriented with respect to said first reflector so that said first optical axis and said second optical axis are substantially collinear, said second reflector being positioned and oriented with respect to said first reflector so that the second focal point of the first reflector and a second focal point of the second reflector are positioned substantially proximate, and the converging rays of radiation reflected from said first reflector pass through the second focal point of the first reflector and are substantially redirected by said second reflector toward the target positioned substantially proximate the second focal point of said second reflector.

13.   (Previously presented)   The optical device of claim 12, wherein said first reflector and said second reflector have substantially the same size and shape and are oriented optically symmetrically with respect to each other so that each ray of radiation reflected by a surface portion of said first reflector is reflected by a corresponding surface portion of said reflector toward said target so as to achieve substantially unit magnification between the rays of electromagnetic radiation being

directed substantially proximate to said focal point of said first reflector and the target.

14.   (Previously presented)   The optical device of claim 12, further comprising an additional reflector constructed and arranged to reflect at least part of a portion of electromagnetic radiation that does not impinge directly on said first reflector toward said first reflector through the first focal point of said first reflector to increase the flux intensity of the converging rays.

15.   (Previously presented)   A method for collecting rays of electromagnetic radiation and focusing the collected rays of electromagnetic radiation onto a target, said method comprising the steps of:

directing said rays of electromagnetic radiation substantially proximate to a first focal point on a first optical axis of a first reflector so that said first reflector substantially converges said rays of radiation reflected from said first reflector at a second focal point on said first optical axis;

positioning a second reflector so that a first focal point on a second optical axis of the second reflector is substantially proximate with the second focal point of the first reflector, whereby the converging rays of radiation reflected from said first reflector pass through the first focal point of the first reflector and are redirected by said second reflector toward a second focal point on said second optical axis

positioning the target proximate to the second focal point of said second reflector; and

orientating the first reflector and the second reflectors so that said first and second optical axes are substantially collinear.

16.   (canceled)